Work Order ID 58156

April 26, 2010 2:19:05 PM

Item ID: D4054-003 **Accept** **Setup Start**

Revision ID: **Stop**

Item Name: Tube Assembly

Start Date: 4/26/10 **Start Qty:** 8.00 **Cust Item ID:**

Required Date: 5/04/10 **Req'd Qty:** 8.00 **Customer:**

Reference:

Approvals: **Process Plan:** W **Date:** **Tooling:** **Date:** **Run Start**

QC: **Date:** **SPC (Y/N):** **Date:** **Stop**

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr: D4054 / Revision Nbr: A						8x			
100		0.00							
Small Fab	Small Fab								
Small Fab	**Memo**	0.00							
	Bend tube as per Dwg D4054 Install sleeves and nuts Flare ends as per Dwg D4054.								
110	QC5- Inspect part completeness to step on W/O	0.00							
QC									
Quality Control	**Memo**	0.00				x8			

M.L 10/06/23

S 10/06/24

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries

Work Order ID 58156

April 26, 2010 2:19:06 PM

Item ID: D4054-003 **Accept** **Setup Start**

Revision ID: **Stop**

Item Name: Tube Assembly

Start Date: 4/26/10 **Start Qty:** 8.00 **Cust Item ID:**

Required Date: 5/04/10 **Req'd Qty:** 8.00 **Customer:**

Reference:

Run Start

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Stop

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	Identify as per dwg & Stock Location: 193	0.00							
Packaging	**Memo**	0.00							
Packaging						10/4/25 (8)			
130	QC21- Final Inspection - Work Order Release	0.00							
QC	**Memo**	0.00							
Quality Control						10/06/28 (8)			
						CL 10/6/25			

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W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries

Picklist Print

April 26, 2010 2:19:04 PM

T

Work Order ID: 58156

Parent Item: D4054-003

Parent Item Name: Tube Assembly

Start Date: 4/26/10 **Required Date:** 5/04/10

Comments: IPP rev A 10.01.19 new issue EC verified by:DD

Start Qty: 8.00 **Required Qty:** 8.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
AN818-8D		Purchased	No			100	Each	29.0000	16.0000			
Nut												

Warehouse Location	Loc Qty	Loc Code
Main Warehouse	M114523	
ST331	29	
113795 ✓	9	
114382 ✓	20	

4X M.L 10/06/23

~~12X~~

M6061T6T0.500W.049		Purchased	No			100	f	21.6072	16.3368			
6061-T6 RD Tube .500 x.049W												

Warehouse Location	Loc Qty	Loc Code
Main Warehouse	M114812	
MAT014	21.6072	
111028	16.5895	
111944	5.0177	

16.3368 M.L 10/06/22

MS20819-8D		Purchased	No			100	Each	40.0000	16.0000			
Sleeve												

Warehouse Location	Loc Qty	Loc Code
Main Warehouse		
ST323	40	
113795 ✓	40	

M11 5001

~~8X~~ M.L

8X 10/06/23

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W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

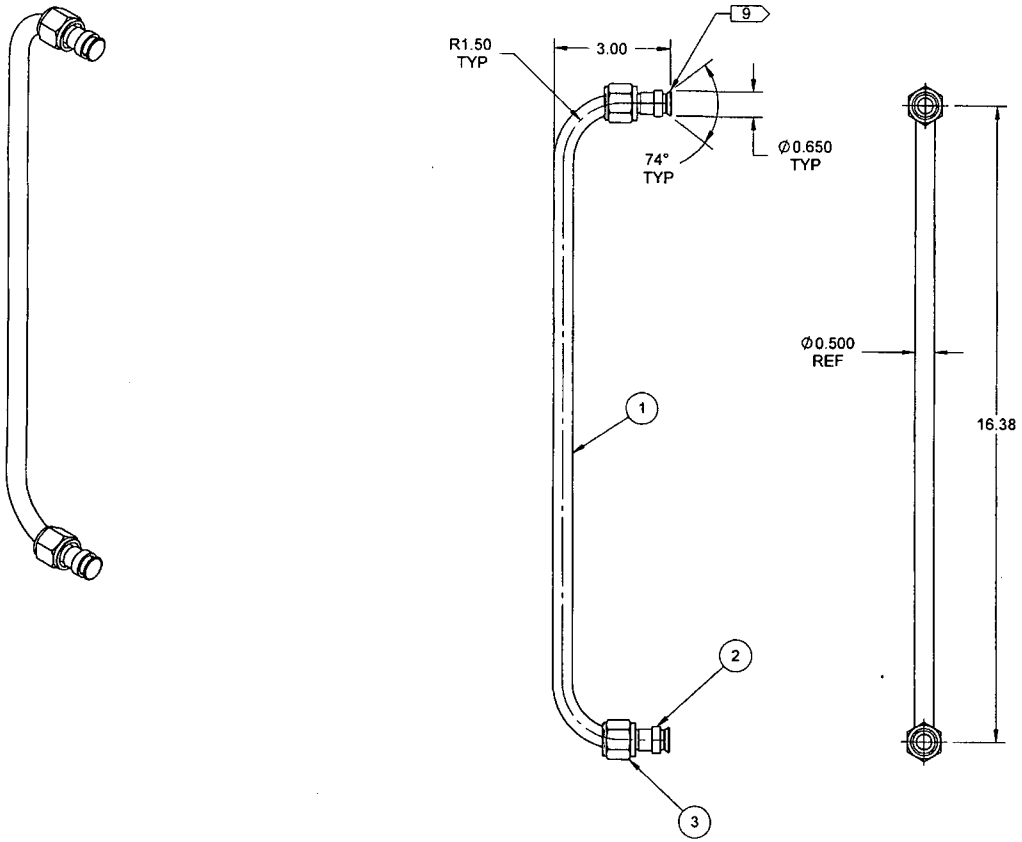
Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries

ITEM NO.	QTY -001	P/N	DESCRIPTION
1	X	D4054-001	TUBE ASSEMBLY
2	2	MS20819-8D	SLEEVE
3	2	AN818-8D	NUT



D4054-001 TUBE ASSEMBLY

NOTES:
1) MATERIAL: 6061-T6 SEAMLESS ALUMINUM TUBING 0.500 O.D. x 0.049 WALL
PER WW-T-700/6
REF DART SPEC M6061T60.500W.049
2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4054-001" USING FINE POINT PERMANENT INK MARKER
7) WEIGHT: 0.20 lbs
8) TUBING ASSEMBLIES TO BE CUT AND BENT IN ACCORDANCE WITH TEMPLATE D4054-001T1
9) TUBES TO BE FLARED 37° TO MATE WITH MS33514 FITTINGS, TYPICAL
10 ENSURE SEAMLESS TUBING IS USED

w/o 58156

RELEASED
2010 -01- 14
WD

REV.	DESCRIPTION	BY	DATE
A	NEW ISSUE	RF	09.12.30

DESIGN	RF	DART AEROSPACE LTD
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA
CHECKED		DRAWING NO. D4054 REV. A
MFG. APPR.		SHEET 1 OF 3
APPROVED		TITLE TUBE ASSEMBLIES SCALE NTS
DE APPR.		
DATE	09.12.30	

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Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

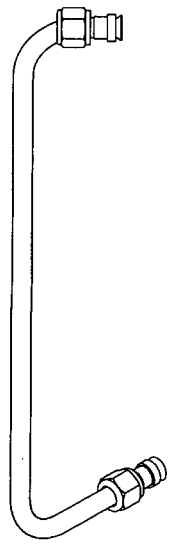
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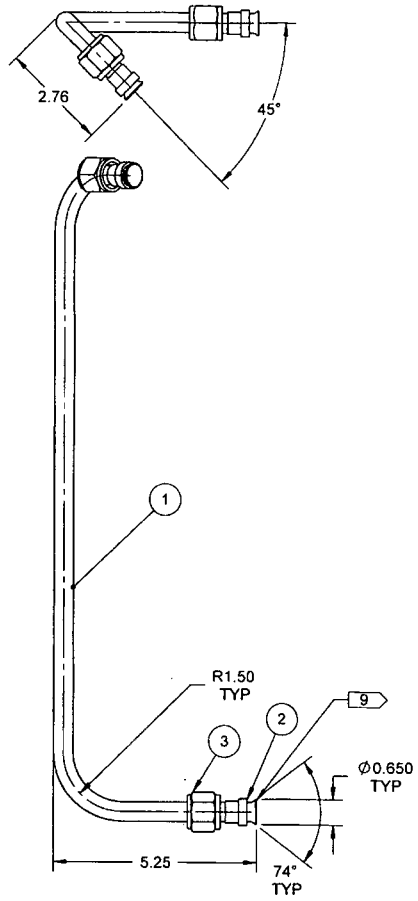
Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

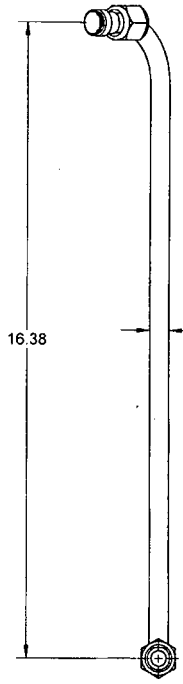
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DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries

ITEM	QTY -003	P/N	DESCRIPTION
1	X	D4054-003	TUBE ASSEMBLY
2	2	MS20819-8D	SLEEVE
3	2	AN818-8D	NUT







wlo 5856

RELEASED
2010-01-14

NOTES:
1) MATERIAL: 6061-T6 SEAMLESS ALUMINUM TUBING 0.500 O.D. x 0.049 WALL
PER WW-T-700/6
REF DART SPEC M6061T60.500W.049
2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4054-003" USING FINE POINT PERMANENT INK MARKER
7) WEIGHT: 0.21 lbs
8) TUBING ASSEMBLIES TO BE CUT AND BENT IN ACCORDANCE WITH TEMPLATE D4054-003T1
9) TUBES TO BE FLARED 37° TO MATE WITH MS33514 FITTINGS, TYPICAL
10 ENSURE SEAMLESS TUBING IS USED

D4054-003 TUBE ASSEMBLY

DESIGN	RF	**DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA
DRAWN	RF	
CHECKED		DRAWING NO. D4054 REV. A SHEET 2 OF 3
MFG. APPR.		
APPROVED		TITLE TUBE ASSEMBLIES SCALE NTS
DE APPR.		
DATE	09.12.30	

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W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

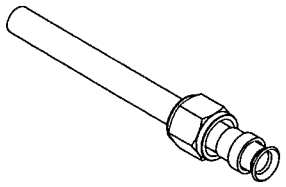
Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

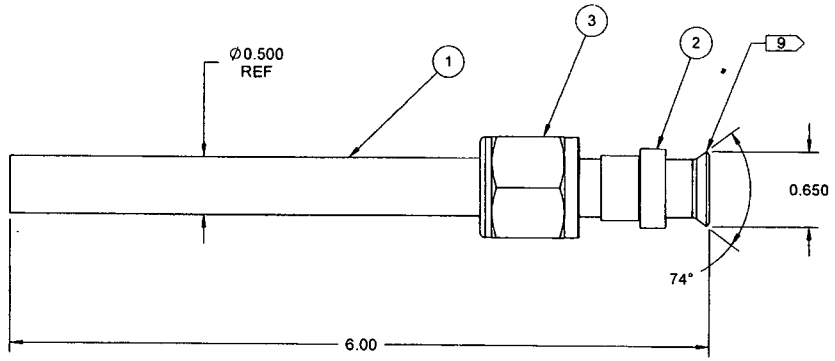
Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

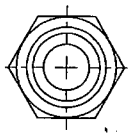
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries

ITEM	QTY -009	P/N	DESCRIPTION
1	X	D4054-009	TUBE ASSEMBLY
2	1	MS20819-8D	SLEEVE
3	1	AN818-8D	NUT







D4054-009 TUBE ASSEMBLY

RELEASED
2010 -01- 14

NOTES:
1) MATERIAL: 6061-T6 SEAMLESS ALUMINUM TUBING 0.500 O.D. x 0.049 WALL
PER WW-T-700/6
REF DART SPEC M6061T60.500W.049
2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4054-009" USING FINE POINT PERMANENT INK MARKER
7) WEIGHT: 0.07 lbs
8) TUBING ASSEMBLIES TO BE CUT AND BENT IN ACCORDANCE WITH TEMPLATE D4054-009T1
9) TUBES TO BE FLARED 37° TO MATE WITH MS33514 FITTINGS
10 ENSURE SEAMLESS TUBING IS USED

DESIGN	RF	DART AEROSPACE LTD
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA
CHECKED		DRAWING NO. D4054 REV. A
MFG. APPR.		SHEET 3 OF 3
APPROVED		TITLE TUBE ASSEMBLIES SCALE NTS
DE APPR.		
DATE	09.12.30	

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W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

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DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries